

FIG. 1

```
<CATname="ccs"
  <CAT name="arts"
    <cat name="music"
      <cat name="concerts"
        <STR field="performer,
          <IMPurl="rt//www.ticketmaster.co
          <IMPurl="rt//www.concerts.com
        </CAT
      </CAT
    </CAT
  <CAT
  </CAT
  <CAT name="recreation"
  </CAT
  <CAT
    ping"
    <CAT name="entertainment"
      <CAT name="recordings"
        <SYN word="CD" list="compact
        <STR field="artist, album,
        <IMPurl="rt//www.cdnnow.com
        <IMPurl="rt//www.amazon.com
        <IMPurl="rt//www.half.com"
      </CAT
    </CAT
  </CAT
</CAT
```

FIG

FIG. 2

```
<!-- Copyright (C) 2000 WebUnwired www.WebUnwired.com -->
<!-- CCS.dtd -->

<!-- The Category tag can contain RFI structure definitions, Synonym -->
<!-- tables and URLs pointing to content providers implementing this -->
<!-- category. Each category must list a name and an ID field. -->
<!ELEMENT CAT ((STR?), (CAT, SYN, IMP)*)>
<!ATTLIST CAT name CDATA #REQUIRED id CDATA #REQUIRED>

<!-- The STR tag defines the relational schema for a category. The -->
<!-- only supported data type is string and the field names are to -->
<!-- be listed as a comma separated list. -->
<!ELEMENT STR>
<!ATTLIST STR field CDATA #REQUIRED>

<!-- The IMP tag specifies the URL of the content provider that -->
<!-- implements this category. A category may list more than one -->
<!-- content sources as implementers of this category. -->
<!ELEMENT IMP>
<!ATTLIST IMP url CDATA #REQUIRED>

<!-- If a category contains a SYN tag, then an RFI query executed -->
<!-- against this category that uses the 'like' clause will use -->
<!-- synonyms listed here for it's matching algorithm. -->
<!ELEMENT SYN>
<!ATTLIST SYN word CDATA #REQUIRED list CDATA #REQUIRED>
```

FIG 2

```

<?xml version='1.0' encoding='us-ascii'?>
<!-- Copyright (C) 2000 WebUnwired www.WebUnwired.com -->
<!-- RESULTS.dtd -->

<!-- Top level tag... all results are contained with in a RESULTS tag. -->
<!-- A results tag can contain 0 or many SET tags, which actually contain -->
<!-- the results. -->
<ELEMENT RESULTS (SET)*>
<!ATTLIST RESULTS query CDATA #REQUIRED>

<!-- The SET tag actually encapsulates the results. It must contain the -->
<!-- schema for the category for which the results are valid, identify -->
<!-- the schema itself, contain a unique set number, and finally 0 or 1 -->
<!-- results tag which points to the URL of the resulting content page. -->
<ELEMENT SET (FIELD*, RESULT?)>
<!ATTLIST SET cat CDATA #REQUIRED id CDATA #REQUIRED>

<!-- The field tag identifies a field in the schema corresponding to the -->
<!-- category against which the query was executed. It must identify -->
<!-- a value for the field or nothing if the field is not implemented. -->
<!-- Typically there will be more than one field per category. -->
<ELEMENT FIELD (#PCDATA)>
<!ATTLIST FIELD name CDATA #REQUIRED>

<!-- If the results tag is included with in a results set, then it -->
<!-- identifies a URL pointing to a content page where the results -->
<!-- this resulting row of the query is available. -->
<ELEMENT RESULT>
<!ATTLIST RESULT url CDATA #REQUIRED>

```

FIG 3

```

<RESULTS query="select * from ticketmaster.com:arts.music.concerts where artist='x'">
  <SET cat="1" id="1">
    <FIELD name="artist">X</FIELD>
    <FIELD name="location">San Jose</FIELD>
    <RESULT url="http://www.ticketmaster.com/aaabbbccc"/>
  </SET>
  <SET cat="1" id="2">
    <FIELD name="artist">X</FIELD>
    <FIELD name="location">New York</FIELD>
    <RESULT url="http://www.ticketmaster.com/111222333"/>
  </SET>
</RESULTS>

```

FIG 4

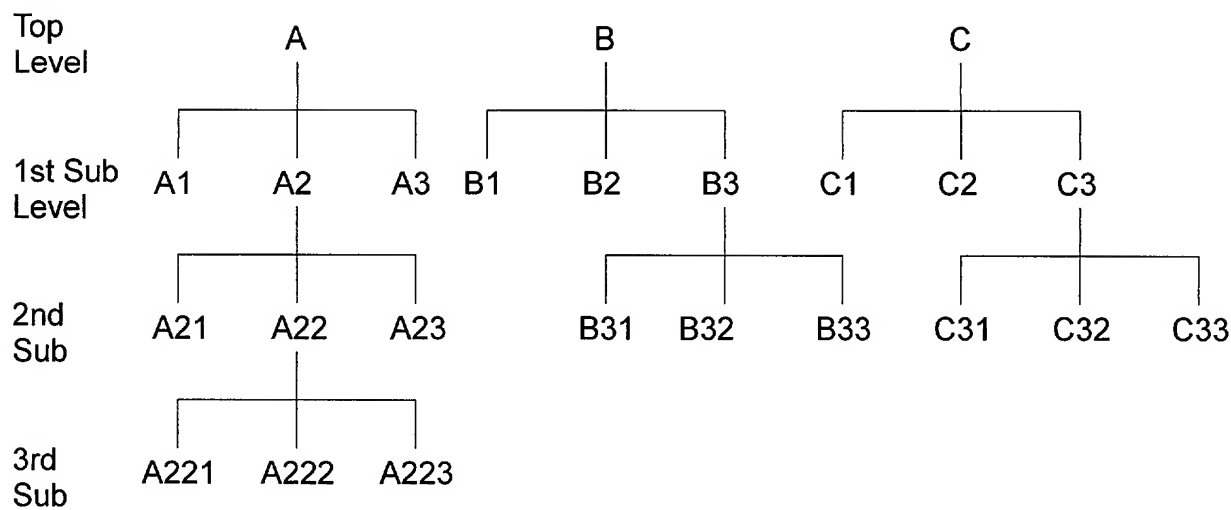


FIG. 5

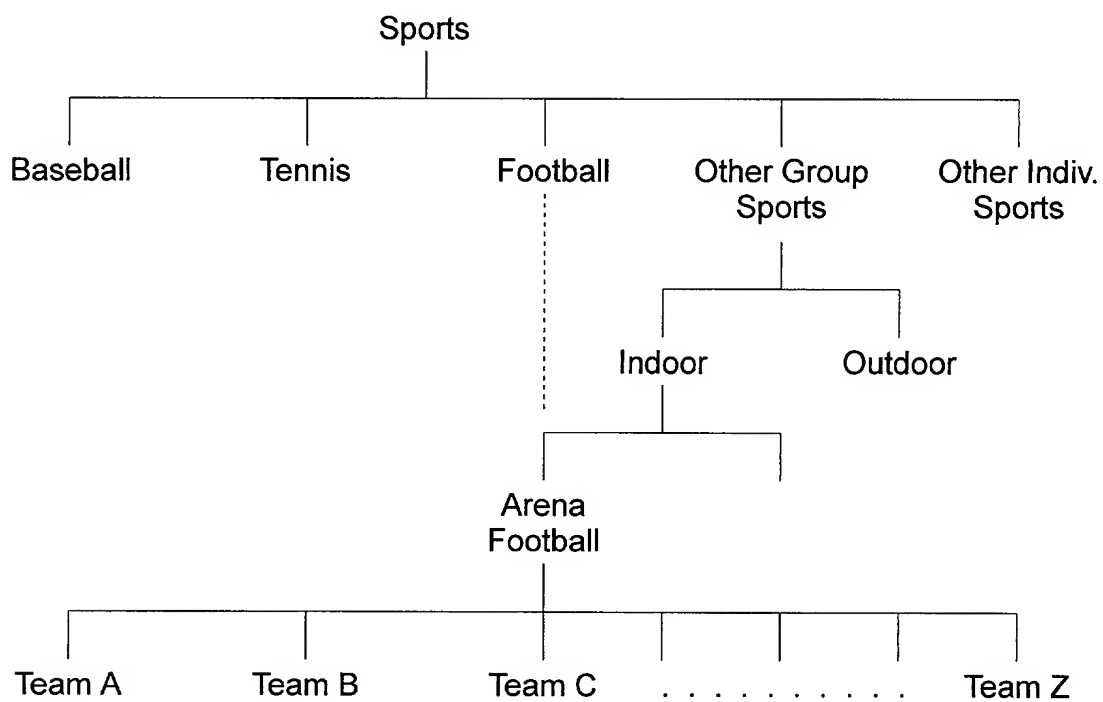


FIG. 6

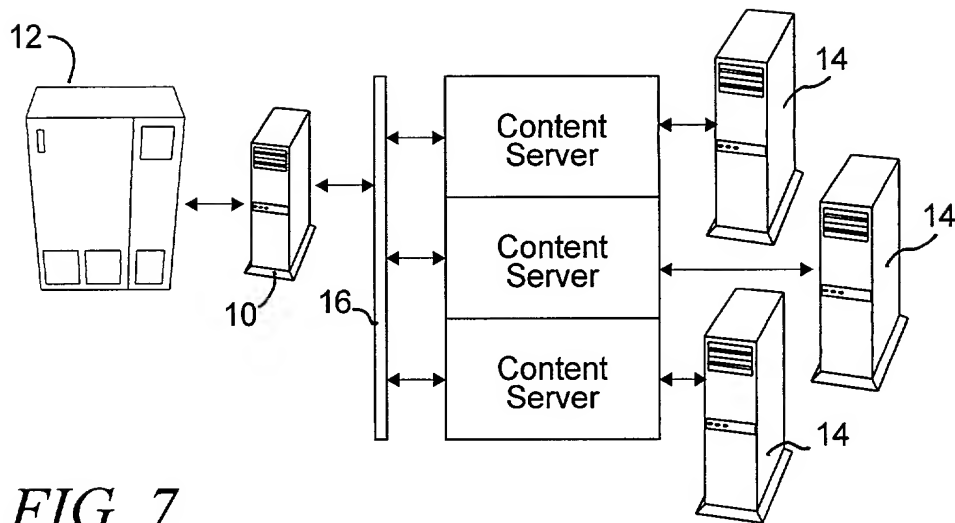


FIG. 7

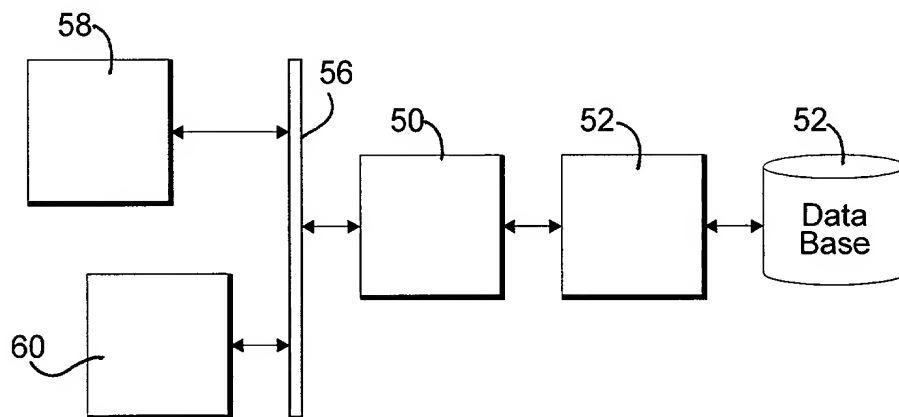


FIG. 11

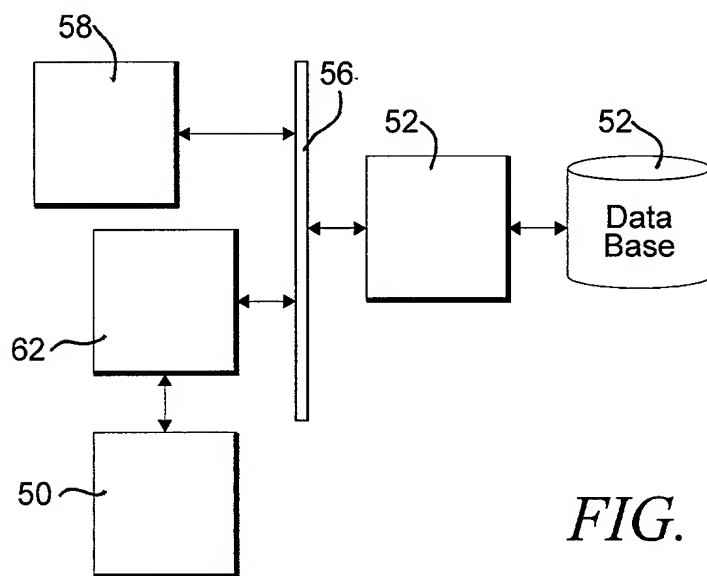


FIG. 12

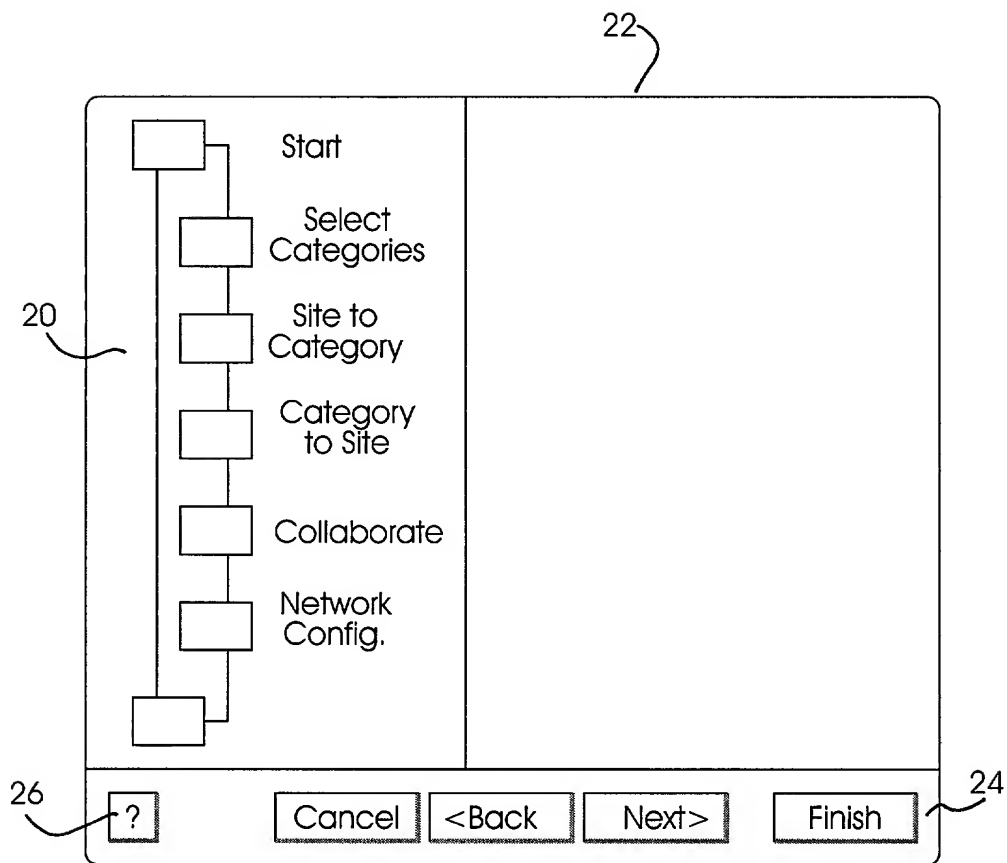


FIG. 8

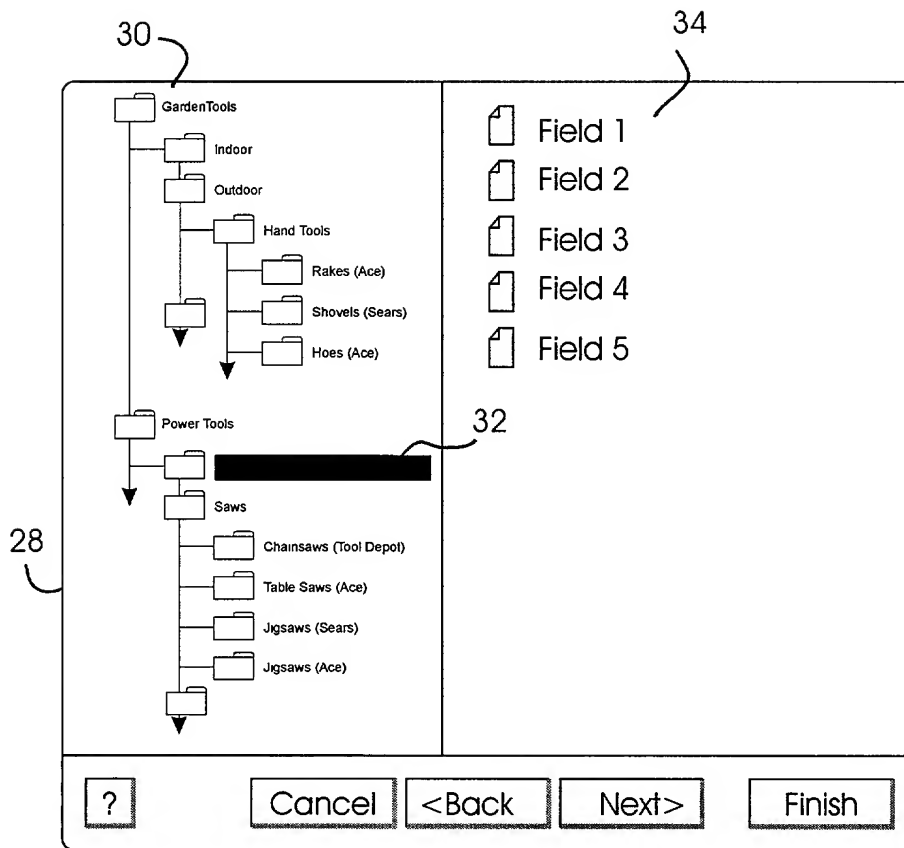


FIG. 9

FIG. 10



HTTP Request
From Client

Content
Recognition

Pre-process HTTP
request and forward
to content server

Convert content
to DOM

Classify content
using XML
recognition rules

Content
Mapping

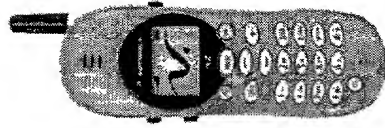
Issue request
for related
content

Content mapping
algorithms locate
related content
at collaborating
sites

Content
Fusion

Integrate related
content with
primary content

Format converted
content to
desired output
format (HTML,
WML, XML,
PDF, etc.)



Collaborated
Content to User

FIG. 13